



Application No.: 10/774,446
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Reply to Office Action of November 9, 2005

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Art Unit: 3617
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CLAIM SET AS AMENDED

1. (Currently Amended) A mounting structure of a tire pressure sensing system in a tire pressure sensing system in which a pressure sensor is placed on a wheel to sense pressure of a tire which is mounted on the wheel,

wherein the wheel is a cast wheel for a vehicle including a rim portion where the tire is mounted, a hub portion provided at a center of the rim portion, and spoke portions connecting the rim portion and the hub portion, and

the air pressure sensor is placed in a boundary portion between the rim portion and the spoke portions,

~~the air pressure sensor having an end portion extending outwardly from opposite sides of the air pressure sensor, and at least one of the end portions having a hole for accommodating a rivet, the rivet connecting the air pressure sensor to the wheel~~

wherein a central part of an outer surface of the air pressure sensor is exposed and faces radially outward toward an interior of the tire, and

wherein a central part of an inner surface of the air pressure sensor is separated by a space from the wheel in a radially inward direction.

2. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 1, wherein a recessed portion having a shape recessed toward the hub portion is provided, the recessed portion extending into a radially outward end of one of the spoke portions, and the air pressure sensor is placed in the recessed portion.

3. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 1, wherein the air pressure sensor is placed on an opposite side of an air valve which fills air to the tire.

4. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 2, wherein the air pressure sensor is placed on an opposite side of an air valve which fills air to the tire.

5. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 1, wherein the air pressure sensor is placed on a side which is 180 degrees (+/- 20 degrees) from the location of an air valve which fills air to the tire.

6. (Currently Amended) The mounting structure of a tire pressure sensing system according to claim 2, wherein collars are formed in the boundary portion, ~~and the at least one of the end portions of the air pressure sensor is the tire pressure system being mounted on at least one of the collars with the rivet~~ fastening members.

7. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 2, wherein an insertion hole is formed in the boundary portion between a rim portion and a spoke portion, through which a detecting and transmitting unit is inserted into the recessed portion.

8. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 2, wherein the air pressure sensor does not protrude into the tire and is lowered down into the spoke portions.

9. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 1, wherein the air pressure sensor is mounted on a stay with the rivet, the stay having bent portions which are formed on ends thereof, the bent portions being welded to the rim portion.

10. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 9, wherein an escape hole is provided allowing a body portion of the air pressure sensor to escape.

11. (Currently Amended) A mounting structure of a tire pressure sensing system in a tire pressure sensing system in which a pressure sensor is placed on a wheel to sense pressure of a tire which is mounted on the wheel,

wherein the wheel is a cast wheel for a vehicle including a rim portion where the tire is mounted, a hub portion provided at a center of the rim portion, and spoke portions connecting the rim portion and the hub portion,

the air pressure sensor is placed in a boundary portion between the rim portion and the spoke portions,

wherein an air valve which fills the tire being positioned separately from the air pressure sensor,

~~the air pressure sensor having an end portion extending outwardly from a side of the air pressure sensor in a direction parallel to upper and lower surfaces of the air pressure sensor, and the end portion being connected to the wheel by a rivet~~

wherein a central part of an outer surface of the air pressure sensor is exposed and faces radially outward toward an interior of the tire, and

wherein a central part of an inner surface of the air pressure sensor is separated by a space from the wheel in a radially inward direction.

12. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 11, wherein a recessed portion having a shape recessed toward the hub portion is provided, the recessed portion extending into a radially outward end of one of the spoke portions, and the air pressure sensor is placed in the recessed portion.

13. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 11, wherein the air pressure sensor is placed on an opposite side of the air valve which fills the air to the tire.

14. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 12, wherein the air pressure sensor is placed on an opposite side of an air valve which fills air to the tire.

15. (Previously Presented) The mounting structure of a tire pressure sensing system according to claim 11, wherein the air pressure sensor is placed on a side which is 180 degrees (+/- 20 degrees) from the location of an air valve which fills air to the tire.

16. (Currently Amended) The mounting structure of a tire pressure sensing system according to claim 12, wherein collars are formed in the boundary portion, ~~and the end portion of the air pressure sensor is the tire pressure sensing system being mounted on at least one of the collars with the rivet~~ fastening members.

17. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 12, wherein an insertion hole is formed in the boundary portion between a rim portion and a spoke portion, through which a detecting and transmitting unit is inserted into the recessed portion.

18. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 12, wherein the air pressure sensor does not protrude into the tire and is lowered down into the spoke portions.

19. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 11, wherein the air pressure sensor is mounted on a stay with the rivet, the stay having bent portions which are formed on ends thereof, the bent portions being welded to the rim portion.

20. (Withdrawn) The mounting structure of a tire pressure sensing system according to claim 19, wherein an escape hole is provided allowing a body portion of the air pressure sensor to escape.